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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Scott Dresden

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06/13/2006

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EXAMINER

SAEED, USMAAN

ART UNIT

PAPER NUMBER

2166

DATE MAILED: 06/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/664,787	Applicant(s) DRESDEN, SCOTT	
	Examiner Usmaan Saeed	Art Unit 2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 30-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1,3-7 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/20/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

Group I. Claims 1-7, drawn to a method for processing a search request, classified in class 707, subclass 6.

Group II. Claim 30-35, drawn to a method for finding a document or page on a network, classified in class 709, subclass 218.

The inventions are distinct, each from the other because of the following reasons:

Inventions I - II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, each of the respective inventions has a separate utility as in a system not having the others. See M.P.E.P. § 806.05(d).

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the search required for group I is not required for the other groups, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed.

During a telephone conversation with Mr. Dort on 05/31/2006 a provisional election was made without traverse to prosecute the invention of group II, claims 30-35. Affirmation of this election must be made by applicant in replying to this Office action. Claim 1-7 have been withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

2. Claims 30-35 are pending in this office action.

Priority

3. This application is a continuation of and claims priority to Patent Application Serial No. 10/390590 filed March 18, 2003. The Serial No. provided by the applicant is incorrect and needs to be corrected.

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Canada on 7/26/2002. It is noted, however, that applicant has not filed a certified copy of the 2,395,905 application as required by 35 U.S.C. 119(b).

Information Disclosure Statement

4. Applicants' Information Disclosure Statement, filed on 10/20/2003 has been received, entered and considered. See attached form PTO-1449. The reference "Discovering Text Databases with Neural Nets" by Yong S. Choi is not considered since a copy of this reference wasn't received.

Drawings

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "1005" has been used to designate both Generation of data in figure 9 and to a website in figure 2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the

figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: for example 10, 1000, and 1010. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Appropriate correction is required for all the reference numeral not in the drawings but mentioned in the description since there are too many to be mentioned.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: for example 1250 in figure 9, 1130 in fig 10, and 1161-1168 in figure 16. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Appropriate correction is required for all the reference numeral in the drawings but not mentioned in the description since there are too many to be mentioned.

The drawings are also objected to because there are some numerals, which are both present in the drawings and description but they do not reflect to the same part being discussed. For example in figure 9 1050 talks about Train A/I but in description step 1050 talk about the search processing system receiving an input query. Appropriate correction is required for all the informalities of this kind.

Specification

6. The specification is objected because there are some numerals, which are both present in the drawings and description but they do not reflect to the same part being discussed. For example in figure 9 1050 talks about Train A/I but in description step 1050 talk about the search processing system receiving an input query. Appropriate correction is required for all the informalities of this kind.

Claim Objections

7. Claim 30 is objected to because of the following informalities: The copy of amendments received on 5/31/2006 is very unclear e.g. evaluatinge, data inputs are eachis. The cancellation/addition of words is very unclear. Appropriate correction is required.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 30-35 are rejected under 35 U.S.C 102(e) as being anticipated by **Sullivan et al. (Sullivan hereinafter)** (US Patent No. 6,792,412).

With respect to claim 30, **Sullivan teaches a method for finding a document or page located on a network through a uniform resource locator in which a search engine including executable instructions running on one or more computing devices evaluates data regarding a set of characteristics for a set of said pages or documents and returns a set of one or more relevant documents in response to a search inquiry including of search queries, “wherein the improvement includes using multiple inputs of a neural network”** as at least one neural network module selects one or more of a plurality of objects to receive information from the plurality of information sources based on a plurality of inputs and a plurality of weight values during that epoch (**Sullivan Abstract**) **“each said input responsive to a different one of said set of characteristics”** as the conclusion of an epoch, the neural network takes the feedback and redetermines the weight vector for future input (**Sullivan Col 13, Lines 22-25**). Feedback may comprise responses received or assigned based on predetermined algorithms corresponding to one or more outputs from the neural network. Feedback may include usefulness ratings, timeliness ratings, value ratings, ratings, like-dislike rating or the like, for example (**Sullivan Col 4, Lines 61-65**) **“said neural network evaluating said data and returning said set of one or more relevant documents”**

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as the input nodes of neural network 26 in link distribution system 400 may comprise key words for a search engine. In this embodiment, server web link module 428 may comprise a web page search engine that provides links based on key words supplied by a user. Using the present invention, the search engine may produce results based not only on the inclusion of certain key words within a web page, but also upon feedback from users regarding the usefulness of those web pages when those key words were entered (**Sullivan** Col 18, Lines 26-36) **“said neural network being virtual and trainable”** as the neural network may operate using feedback techniques such as the backpropagation algorithm, or any other feedback based adaptive learning algorithm (**Sullivan** Col 6, Lines 42-46) **“wherein said data inputs are eachis weighted prior to processing by said neural network and said weighting is based upon an initial weighting rule or an adjusted weighting rule”** as a plurality of objects to receive information from the plurality of information sources based at least in part on a plurality of inputs and a plurality of weight values during that a predetermined time, or epoch. Based on the rating value and the selections made, the neural network redetermines the weight values within the network. This may be considered to be a batch prorogation process whereby multiple feedback values are used to recalculate the weight values. It is also possible to recalculate the weight values for each feedback value received (**Sullivan** Col 5, Lines 5-25).

With respect to claim 31, **Sullivan** teaches **“the method as recited in claim 30, wherein fuzzy logic is applied to said neural network at either a low level or high**

level or both” as the present invention has been described using a neural network module 26, the artificial intelligence agent may also comprise any other artificial intelligence agent including a fuzzy logic device, expert system, or inference machine, for example (**Sullivan** Col 19, Lines 23-27).

With respect to claim 32, **Sullivan** teaches **“the method as recited in claim 30, wherein said neural network is controlled by a set of one or more expert rules either directly or indirectly through fuzzy logic or both”** as the present invention has been described using a neural network module 26, the artificial intelligence agent may also comprise any other artificial intelligence agent including a fuzzy logic device, expert system, or inference machine, for example (**Sullivan** Col 19, Lines 23-27). A number of learning rules are available for use by neural network modules, and any of these rules may be used according to the present invention. For example, pattern association, the Hebb rule, the Delta Rule, the Generalized Delta Rule, Standard backpropagation, enhanced backpropagation, batch backpropagation, backpropagation with weight decay, quickprop, Rprop, backpercolation 1, counterpropagation, DLVQ, the Cascade Correlation algorithm, the recurrent Cascade-Correlation algorithm, or any other learning rule or learning rule using pattern associators may be used (**Sullivan** Col 7, Lines 24-34).

With respect to claim 33, **Sullivan** teaches **“the method as recited in claim 32, wherein said set of one or more expert rules is activated by user data”** as the input

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nodes of neural network 26 in link distribution system 400 may comprise key words for a search engine. In this embodiment, server web link module 428 may comprise a web page search engine that provides links based on key words supplied by a user (**Sullivan** Col 18, Lines 26-32). Learning algorithms adapt to changes in input by modifying weight values used by neural networks (**Sullivan** Col 7, Lines 22-34).

With respect to claim 34, **Sullivan** teaches “**the method as recited in claim 32, wherein said set of one or more expert rules is activated by at least a portion of said search inquiry**” as the input nodes of neural network 26 in link distribution system 400 may comprise key words for a search engine. In this embodiment, server web link module 428 may comprise a web page search engine that provides links based on key words supplied by a user (**Sullivan** Col 18, Lines 26-32). Learning algorithms adapt to changes in input by modifying weight values used by neural networks (**Sullivan** Col 7, Lines 22-34). Therefore the rules are activated by changes in input/portion of search inquiry.

With respect to claim 35, **Sullivan** teaches “**the method as recited in claim 30, wherein said act of training said neural network includes evaluating said set of one or more relevant documents by either comparing said set of one or more relevant documents to a previously returned search result or through a feedback mechanism and providing an adjusted weighting rule that will change the weight of said set of inputs each responsive to one of said set of characteristics**” as the

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back-propagation algorithm may be used to adjust the weight values based on a comparison of the output generated and the feedback provided (**Sullivan** Col 7, Lines 35-38). A plurality of objects to receive information from the plurality of information sources based at least in part on a plurality of inputs and a plurality of weight values during that a predetermined time, or epoch. Based on the rating value and the selections made, the neural network redetermines the weight values within the network. This may be considered to be a batch prorogation process whereby multiple feedback values are used to recalculate the weight values. It is also possible to recalculate the weight values for each feedback value received (**Sullivan** Col 5, Lines 5-25).

Conclusion

9. The prior art made of record and not replied upon is considered pertinent to applicant's disclosure is listed on 892 form.

Contact Information

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usmaan Saeed whose telephone number is (571)272-4046. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (571)272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Usmaan Saeed
Patent Examiner
Art Unit: 2166



Leslie Wong
Primary Examiner

US
June 06, 2006